

**MONDAY, OCT 19th**

SESSION: ASPECTS OF OPTIMAL TRANSPORT  
CHAIR: **John M. Finn**

8:00 Breakfast and Welcome

8:45 **Rick Chartrand**

'A simple algorithm for solving the Monge-Kantorovich problem'

9:25 **Robert McCann**

'When is multidimensional screening a convex program? Uniqueness and stability of optimal strategies in the principal-agent problem'

10:05 Coffee break and Poster Set-up

10:50 **Adrian Tudorascu**

'On the velocities of flows consisting of cyclically monotone maps'

11:30 **Dejan Slepcev**

'Biological aggregation, interfaces, and coarsening'

12:10-2:00 Lunch on your own

SESSION: OPTIMAL TRANSPORT AND IMAGING  
CHAIR: **James Theiler**

2:00 **Gary Sandine**

'Metrics, measures and PDEs in image analysis'

2:40 **Eldad Haber**

'Numerical methods for optimal mass transport'

3:20 Coffee break with Poster Viewing

4:10 **Sameer Sheorey**

'Fast approximation of the Kantorovich-Rubinstein metric and applications to computer vision'

4:50 **Yaron Lipman**

'Volume transportation for surfaces'

**TUESDAY, OCT 20th**

SESSION: OPTIMAL TRANSPORT AND MESH ADAPTATION

CHAIR: **Markus Berndt**

7:30 Breakfast

8:30 **Patrick Knupp**

'Remarks on grid generation, equidistribution, and solution-adaptation'

9:10 **Weizhang Huang**

'A variational mesh adaptation method based on mesh equidistribution and alignment'

9:50 **Glen Hansen**

'Mesh generation and adaptation using the Laplace-Beltrami target metric'

10:30 Coffee break with Poster Viewing

11:00 **Luis Chacon**

'A robust multidimensional mesh motion approach based on Monge-Kantorovich optimization'

11:30 **Chris Budd**

'Optimal transport methods for grid generation, with applications to numerical weather prediction'

12:20 Lunch on your own

CONTRIBUTED TALKS AND POSTER SESSION

CHAIR: **Rick Chartrand**

2:15 **Tauseef Rehman**

'Surface warping and image registration'

2:30 **Jean-Francois Cossette**

'Monge-Ampere solvers for semi-Lagrangian trajectory schemes'

2:45 **Brittany Froese**

'Numerical methods for the elliptic Monge-Ampere equation'

3:00 Coffee Break

3:00-5:00 POSTER SESSION

6:00-9:00 BANQUET (Sunset Room)

Speaker - **Gary Geernaert**

'Climate science challenges and its systems dynamics coupling with infrastructure design and finance initiatives'

**WEDNESDAY, OCT 21st**

SESSION: OPTIMAL TRANSPORT AND GEOPHYSICAL FLUID DYNAMICS  
CHAIR: **Balu Nadiga**

8:00 Breakfast

8:45 **Rick Salmon**

'Constructing numerical algorithms that maintain conservation laws'

9:25 **David Dritschel**

'Balance in non-hydrostatic rotating stratified turbulence'

10:05 Coffee break and Poster Take-down

10:50 **Andrei Sobolevskii**

'Transport in shock manifolds in Hamilton-Jacobi equations'

11:30 **Qinglan Xia**

'Diffusion-limited aggregation driven by optimal transportation'

12:10-12:30 Discussion and adjournment